# 1998 Utah Crash Summary



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#### Produced by:

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#### Introduction

The Utah Crash Summary is produced each year to identify and describe the trends and effects of traffic crashes in Utah. These statistics describe the factors that contribute to the occurrence of crashes, and crash related injuries and fatalities. This report is designed to heighten awareness about traffic safety by allowing safety program specialists and public health personnel to identify areas where education or programs may be designed to reduce traffic related injuries and fatalities.

The data for this summary is derived from Utah crash reports. These reported are filled out by law enforcement officers throughout the state who collect data from crash scenes on public roadways. Information is collected when a crash involves injuries, fatalities, when the jurisdiction in which the crash occurs requires it or when the responding officer determines that a report is warranted.

Crash reports are forwarded to the Utah Department of Transportation (UDOT) for central collection. UDOT reviews the crash report forms and enters the data into a database called the Crash Analysis Reporting System (CARS). Beginning in 1997, all private property crashes were excluded from CARS. Since private property crashes account for approximately 10% of crashes in previous years, the decrease in crashes since 1997 is due in part to the exclusion of private property crashes. Additional information is collected on fatal crashes and compiled into a separate database, the Fatality Analysis Reporting System (FARS). This database was used for the reporting of alcohol and other drug-related fatal crashes and fatalities.

This report was prepared by the Utah Crash Outcome Data Evaluation System (CODES) project located at the Intermountain Injury Control Research Center, University of Utah School of Medicine.

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This crash summary is available on the internet at http://codes.med.utah.edu/UtahCrash1998

## **Definitions**

**Alcohol and Other Drug-Related Crash** - A crash in which the investigating officer cited a driver for "driving under the influence" (DUI) or coded a contributing factor of "DUI", "had been drinking" or "under the influence of drugs". Since breath test or blood test results may not always be used to determine alcohol and other drug content, these crashes may be underestimated.

**Alcohol and Other Drug-Related Fatal Crash** - A crash resulting in one or more deaths and in which the drug / alcohol test was positive for any driver, pedestrian, or bicyclist involved in the crash. Alcohol and other drug-related fatal crash information is obtained as part of the FARS database.

**Alcohol and Other Drug-Related Fatality** - A death resulting from an alcohol and other drug-related crash. Since breath test or blood test results may not always be used to determine alcohol and other drug-related crashes, these fatalities may be underestimated.

**Alcohol and Other Drug-Related Injury** - A non-fatal injury resulting from an alcohol and other drug-related crash. Since breath test or blood test results may not always be used to determine alcohol and other drug-related crashes, these injuries may be underestimated.

**Alcohol and Other Drug-Related Injury Crash** - A non-fatal crash in which one or more persons are injured and in which the investigating officer cited a driver for "driving under the influence" (DUI) or coded a contributing factor of "DUI", "had been drinking" or "under the influence of drugs". Since breath test or blood test results may not always be used to determine alcohol and other drug-related crashes, these injury crashes may be underestimated.

**Crash Participant** - A person who is involved in a crash, including motor vehicle occupants, pedestrians and bicyclists.

**Contributing Factor** - The circumstances reported by the investigating officer surrounding a crash that contribute to the crash or the crash severity. Examples are "speed too fast", "fatigue" and "had been drinking".

**Fatal Crash** - A motor vehicle crash on public roadways resulting in one or more deaths. The death must occur within 30 days of the crash.

**Injury Crash** - A crash in which one or more persons sustained a possible injury, probable injury, or an incapacitating injury as recorded by the investigating officer.

**Large Truck Crash** - A crash involving one or more vehicles of the following type: (1) a 2-axel, 6-tire single unit truck or van, (2) a 3 or more axle single unit truck, (3) a single unit truck with one or more trailer, (4) a bobtail (power unit only), (5) a tractor with one or more trailer, (6) a concrete mixer, (7) a garbage/ dump truck, (8) an auto transporter, (9) a flatbed truck, and (10) a cargo tank.

**Million Vehicle Miles Traveled** - The number of miles in millions traveled in a year for a given area. This is calculated by the Utah Department of Transportation.

**Motorcycle Crash** - A crash involving one or more motorcycles or mopeds.

Motor Vehicle Crash - A crash that involves a motor vehicle on public roadways.

**Out of State Driver** - A driver licensed from a state other than Utah who is involved in a crash. These drivers may reside in the state of Utah, but have not yet applied for a Utah driver's license.

**Seatbelt Use** - Seatbelt use is reported for occupants in a passenger car, a light truck or van. Occupants are coded as wearing a seatbelt if they reported using a shoulder/lap belt, lap belt or a child safety seat (occupants using only a shoulder strap were reported to be unbelted). In the majority of cases, seatbelt use as recorded by the investigating officer is self-reported by the crash occupant. It is possible that crash occupants may report using a seatbelt when they were not in order to avoid a citation or fine. In the case of fatal or severe injury crashes the officer will determine the seatbelt use.

**School Bus Crash** - A crash involving one or more school buses.

**Speed-Related Crash** - A crash where the investigating officer cites one or more drivers for "speeding", or codes a contributing factor of "speed too fast".

**Teenage Driver** - A 15 to 19 year old driver.

**Teenage Driver Crash** - A crash involving a teenage driver.

**Teenage Driver Fatal Crash** - A fatal crash involving a teenage driver.

**Teenage Driver Injury Crash** - An injury crash involving a teenage driver.

**Violation** - The traffic violation that a driver was cited for at the scene of the crash. These include both moving and non-moving violations.

## **Executive Summary**

The state of Utah has made great strides in reducing the motor vehicle crash rate. Since 1968, the injury and fatal crash rates in Utah have steadily decreased. The 1998 crash rate of 254.2 per 100 million vehicle miles traveled is the lowest in 30 years. The crash rate reduction can be attributed to local and statewide traffic safety programs that have increased awareness of the problem, laws mandating seatbelt use, decreased speed limits and increased DUI legislation and enforcement. Despite this progress, motor vehicle crashes continue to take their toll. In our state a crash occurs every 10 minutes, a person is injured in a crash every 17 minutes, and one person dies every day from a motor vehicle crash.

In 1998, there were 54,072 crashes accounting for 30,232 injured persons and 350 fatalities in Utah. Overall, crash participants are male, and in the age group 15-24 years. In addition, while most crashes occurred in the urban areas, fatal crashes were more likely to occur in rural areas. Increased speeds and longer response time for emergency medical services in the rural areas may account for the rural/urban difference in fatal crash rates.

Speeding and impaired driving are contributing factors that led to severe injury or death in motor vehicle crashes. There were over 7,788 speed-related crashes in 1998 resulting in 95 fatalities. The majority of the speed-related fatalities occurred on highways. In 1998, almost 2,000 crashes were attributed to alcohol and other drug involvement resulting in 49 fatalities. The percentage of fatalities that were alcohol and other drug-related in 1998 was 14%. This is the lowest percentage in the 1990's. While alcohol and drug-related crashes are a great concern nationwide, speeding appears to be the leading factor associated with crash fatalities and may warrant increased attention in Utah.

Seatbelts have been shown to save lives and decrease the severity of injuries in motor vehicle crashes. In Utah, unbelted occupants were 10 times more likely to sustain a fatal injury than belted occupants. Overall, 89% of the occupants involved in a crash in 1998 reported using a seatbelt, but seatbelt use rates varied by age and type of crash. Children under the age of 5 years had the highest percentage of seatbelt use (95%) while those aged 10-19 years experienced the lowest percentage of use (84%). Unfortunately, the rate for seatbelt use for fatalities was much lower; only 37% of the occupants who died in a crash were reported as wearing a seatbelt. In addition, the majority of ejected occupants (who often suffer severe injury or death) were not wearing a seatbelt.

Pedestrians, bicyclists, and motorcyclists involved in a motor vehicle crash are at risk from suffering an injury or death. In 1998, over 90% of pedestrians or bicyclists involved in a motor vehicle crash experienced an injury or death compared to 22% of all motor vehicle crash participants. Motorcyclists are also vulnerable to injury and death. Approximately 89% of motorcycle crashes resulted in an injury or death. As with seatbelts, helmets have proven to reduce severe injury and death for bicyclists and motorcyclists. Unfortunately, only 25% of motorcyclists involved in a crash were reported to be wearing a helmet.

Utah teenage drivers experience higher crash rates than other drivers. Every half hour, a crash occurs that involves a teenage driver. Lack of driving experience may contribute to the higher crash rates for young drivers. In fact, 42% of the teenage drivers involved in a crash received a citation compared to 34% of all drivers. The leading citations for teenage drivers were "failure to yield right of way", "improper lookout", and "following too closely". In addition, the leading contributing factor to teenage driver fatal crashes was "disregarded traffic signal".

Motor vehicle crashes in Utah continue to be a leading cause of death and disability in the state. Of particular concern are speed-related crashes, and crashes involving pedestrians, motorcyclists and teenage drivers.

## **1998 Crash Synopsis**

#### **Crashes, Injury Crashes and Fatal Crashes**

- 54,072 motor vehicle crashes were reported, a 5% decrease from 1997
- Over 19,000 injury crashes in 1998 were reported, a 12% decrease from 1997
- 308 fatal motor vehicle crashes were reported, the same as 1997
- 38% of fatal crashes occurred between Memorial Day and Labor Day
- Sundays had nearly double the odds for a fatal crash than any other day of the week
- Thanksgiving had the highest fatal crash rate per day among holidays
- Head-on collisions were 15 times more likely to be fatal than other collision types
- Drivers cited for DUI were four times more likely to be involved in a fatal crash than drivers cited for other violations
- Drivers cited for speeding were three times more likely to be involved in a fatal crash than drivers cited for other violations
- Drivers between the age of 16 and 18 years old had the highest crash and injury crash rates per licensed driver
- Out of state drivers were involved in 9% of crashes and 19% of fatal crashes

#### **Crash Participants, Injured Persons and Fatalities**

- 350 crash related fatalities occurred, a 4% decrease from 1997
- For every 86 persons injured in a motor vehicle crash, one person was killed
- Front seat passengers (excluding drivers) were two times more likely than back seat passengers to sustain a fatal injury
- Crash participants over the age of 65 years were three times more likely to be killed than all other age groups

#### **Pedestrian Crashes**

- 851 pedestrians were involved in pedestrian-motor vehicle crashes
- 44 pedestrians were killed, a 13% increase from 1997
- 49% of the fatal pedestrian crashes occurred between Memorial Day and Labor Day
- 48% of the pedestrians were under the age of 20 years
- 44% of the drivers involved in pedestrian crashes were aged 15 to 29 years

#### **Bicyclist-Motor Vehicle Crashes**

- 839 bicyclists were involved in motor vehicle crashes, a 4% decrease from 1997
- 9 bicyclist were killed
- 29% of the motor vehicle drivers involved in bicyclist-motor vehicle crashes were 15 to 24 years of age

#### **Motorcycle Crashes**

- There were 589 crashes that involved motorcycles, a 15% decrease from 1997
- 14 motorcycle crashes were fatal
- 85% of the motorcyclists in crashes were male
- Motorcycle drivers accounted for 93% of motorcyclist fatalities
- 25% of motorcyclists involved in crashes were wearing a helmet

#### **Teenage Driver Crashes**

- 17,362 crashes and 69 fatal crashes involved a teenage driver
- Nearly 42% of all teenage drivers involved in a crash received a citation for a violation compared to 34% of all drivers involved in a crash
- Of the 69 teenager driver fatal crashes 6 involved alcohol or other drugs
- Teenage driver crashes that the teenage driven vehicles had 4 or more occupants were 4 times more likely to be fatal than crashes involving teenage driven vehicles with fewer occupants

#### **Alcohol and Other Drug-Related Crashes**

- 1,909 (4%) crashes and 48 (16%) fatal crashes involved alcohol or other drugs
- 49 fatalities were a result of alcohol and other drug-related crashes, a 44% decrease from 1997
- Male drivers were involved in over two-thirds (80%) of alcohol and other drug-related crashes
- 14% of the impaired drivers were under the age of 21 years
- 86% of drunk drivers involved in fatal crashes had a blood alcohol level above the legal limit of 0.08

#### **Speed-Related Crashes**

- 7,788 (14%) crashes and 90 (36%) fatal crashes were speed-related
- 95 person were killed in speed-related crashes
- The highest percentage of drivers involved in speed-related crashes were aged 15 to 24 years for both males and females

#### **Occupant Protection**

- 89% of all crash participants, 79% of injured crash participants and 37% of the fatalities were reported as using a seatbelt
- Unbelted occupants were 10 times more likely to be killed than belted occupants
- 93% of the ejected passengers were not wearing a seatbelt
- Children under the age of 2 years were 7 times more likely to be in a child safety seat than children between the ages of 2 to 4 years
- Children in the back seat were 3 times more likely to be in a child safety seat than children in the front seat

### 1998 Utah Crash Clock

- One crash occurs every 10 minutes
- One person is injured in a crash every 17 minutes
- One person dies in a crash every 25 hours
- One pedestrian is in a crash every 10 hours
- One pedestrian fatality occurs every 8 days
- One bicyclist is in a crash every 10 hours
- One motorcyclist is in a crash every 13 hours
- One motorcycle fatality occurs every 26 days
- One teenage driver crash occurs every ½ hour
- One teenage driver fatal crash occurs every 5 days
- One alcohol and other drug-related crash occurs every 5 hours
- One speed-related crash occurs every 1 hour
- One unbelted occupant dies every 2 ½ days